by Blakely, Sokoloff, Taylor & Zafman LLP

Approved for use through 10/31/2002. OMB 0651-0032

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Only for new nonprovisional applications under 37 CFR 1.53(b)) Attorn y Docket No. 42.P18070
(maximum 12 characters)

First Named Inventor Pokharna, et al. Title: METHOD AND APPARATUS FOR USING FLUID LADEN WITH NANOPARTICLES FOR APPLICATION IN ELECTRONIC COOLING

Express Mail Label No. EL867636904US

ADDRESS T	O:	Commissioner for Patents

**Mail Stop Patent Application** P.O. Boy 1450

Alexandria VA 22313-1450					
APPLICATION ELEMENTS					
See MPEP chapter 600 concerning utility patent application contents.					
1. <u>X</u>	Fee Transmittal Form (e.g., PTO/SB/17)				
	(Submit an original and a duplicate for fee processing)				
2	Applicant Claims Small Entity Status. (37 CFR 1.27)				
3. <u>X</u>	Specification (Total Pages13) (preferred arrangement set forth below) - Descriptive Title of the Invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D				
	- Reference sequence listing, a table,				
•	or a computer program listing appendix - Background of the Invention				
	- Brief Summary of the Invention - Brief Description of the Drawings (if filed)				
	- Detailed Description				
	- Claim(s) - Abstract of the Disclosure				
4. <u>X</u>	Drawings (35 USC 113) (Total Sheets <u>2</u> )				
5. <u>X</u>	Oath or Declaration (Total Pages <u>4</u> )				
	a Newly Executed (Original or Copy)				
	b Copy from a Prior Application (37 CFR 1.63(d))  (for Continuation/Divisional with Box 18 completed)				
	<ul> <li>i <u>DELETIONS OF INVENTOR(S)</u> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).</li> </ul>				
	c. X Unsigned.				
6	Application Data Sheet. (37 CFR 1.76)				
7	CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)				
8. (if applicab	Nucleotide and/or Amino Acid Sequence Submission				
a	le, all necessary) Computer Readable Form (CRF)				
b	Specification Sequence Listing on: iCD-ROM or CD-R (2 copies); or ii paper				
c	Statement verifying identity of above copies				

ACCOMPANYING APPLICATION PARTS				
9 Assignment Papers (cover sheet & documents(s)) 10 a. Separate 37 CFR 3.73(b) Statement (where there is an assignee)				
b. Power of Attorney				
11 English Translation Document (if applicable)				
12 a. Information Disclosure Statement (IDS)/PTO-1449				
b. Copies of IDS Citations				
13 Preliminary Amendment				
14. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized)				
15 Certified Copy of Priority Document(s) (if foreign priority is claimed)				
Request and Certification under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.				
17A Other:				
Pursuant to 37 C.F.R. 1.136(a)(3), applicant(s) hereby request and authorize the U.S.  Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 02-2666.				
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet Under 37 C.F.R. 1.76:  Continuation Divisional Continuation-in-part (CIP)				
Continuation Divisional Continuation-in-part (CIP)  Of Prior Application No.: Examiner Group Art Unit  (which is a continuation/ divisional/ CIP of prior application no, continuation/ divisional/ CIP of prior application no, (List entire chain of priority)				
Applicant(s): Also include a Preliminary Amendment to amend the specification to claim priority. For CONTINUATION AND DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only b relied upon when a portion has been inadvertently omitted from the submitted application parts.				
19. Correspondence Address				
X Customer Number or Bar Code Label 008791 or (Insert Customer No. or Attach Bar Code Label here) X Correspondence Address Below NAME John P. Ward				
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP ADDRESS 12400 Wilshire Boulevard				
Seventh Floor				
CITY Los Angeles         STATE         California         ZIP CODE         90025-1026           Country         U.S.A.         TELEPHONE (408) 720-8300         FAX (408) 720-8383				
Name (PRINT/TYPE): John P. Ward Registration No.: 40,216 Signature: Date:				

11/20/02 -2-

## FEE TRANSMITTAL FOR FY 2004 (FY 2004 Begins 10/01/2003) TOTAL AMOUNT OF PAYMENT (\$) 914.00 Complete if Known: Application No. Not yet assigned Filing Date \_\_12/31/2003 First Named Inventor Pokharna, et al. Examiner Name Not yet assigned Art Unit Not yet assigned Attorney Docket No. 42.P18070 \_\_ Applicant claims small entity status. See 37 CFR 1.27. **METHOD OF PAYMENT** (check all that apply) X Checks \_\_\_\_ Credit Card \_\_\_\_ Money Order \_ Other None X Deposit Account Deposit Account Number : 02-2666 Deposit Account Name: The Director is Authorized to do the following with respect to the above-identified Deposit Account: Charge fee(s) indicated below. X Credit any overpayments. Charge any additional fees during the pendency of this application. X Any concurrent or future reply that requires a petition for extension of time should be treated as incorporating an appropriate petition for extension of time and all required fees should be charged. Charge fee(s) indicated below except for the filing fee. **FEE CALCULATION** 1. BASIC FILING FEE Large Entity **Small Entity** Fee Fee Fee Fee Code (\$) Code (\$) Fee Description Fee Paid 1001 770 Utility application filing fee 2001 385 770.00 1002 340 2002 Design application filing fee 170 1003 530 2003 265 Plant filing fee 1004 770 2004 Reissue filing fee 385 1005 160 2005 Provisional application filing fee 80 SUBTOTAL (1) \$ 770.00 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from **Extra Claims** below Fee Paid Total Claims - 20\*\* = X 18.00 Independent Claims 3 $-3^{**} = 0$ Multiple Dependent \*\*Or number previously paid, if greater; For Reissues, see below. **Small Entity** Large Entity Fee Fee Fee Fee Code Code (\$) (\$) Fee Description 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 145 1203 290 2203 Multiple dep ndent claim, if not paid 1204 2204 86 \*\*Reissue independent claims over original patent 43 1205 18 2205 9 \*\*Reissue claims in excess of 20 and over original patent SUBTOTAL (2) \$\_144.00

## **FEE CALCULATION (continued)**

## 3. ADDITIONAL FEES

Large	Entity Fee	Small Er	ntity F_e		
Code				Can Description	F B
1051	(\$) 430	Code	(\$) 65	Fee Description	Fee Paid
1051	130 50	2051	65 35	Surcharge - late filing fee or oath	
1052	130	2052 1053	25 130	Surcharge - late provisional filing fee or cover sheet	<del></del>
				Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1813	8,800	1813	8,800	Request for inter parties reexamination	
1804 1805	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251 1252	110	2251	55 240	Extension for reply within first month	
1252	420 950	2252 2253	210	Extension for reply within second month	
1253		2253 2254	475 740	Extension for reply within third month	
1254	1,480 2,010		740	Extension for reply within fourth month	
1401	330	2255	1,005	Extension for reply within fifth month	
		2401	165 465	Notice of Appeal	
1402 1403	330	2402	165 145	Filing a brief in support of an appeal	
1403	290 1,510	2403 1451	145 1 510	Request for oral hearing	
1451	110	2452	1,510 55	Petition to institute a public use proceeding	
1452	1,330	2452 2453	55 665	Petition to revive – unavoidable Petition to revive - unintentional	
1501	1,330	2 <del>4</del> 53 2501	665		
1502	480	2502	240	Utility issue fee (or reissue) Design issue fee	
1503	640	2502	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	<del></del>
8021	40	8021	40	Recording each patent assignment per	
0021	40	0021	40	property (times number of properties)	
1809	770	2809	385	For filing a submission after final rejection	
1003	,,,	2003	303	(see 37 CFR 1.129(a))	
1814	110	2814	55	Statutory Disclaimer	
1810	770	2810	385	For each additional invention to be examined	
.0.0		2010	303	(see 37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design	
			555	application	
1504	300	1504	300	Publication fee for early, voluntary, or normal pub.	
1505	300	1505	300	Publication fee for republication	
1803	130	1803	130	Request for voluntary publication or republication	
1808	130	1808	130	Processing fee under 37 CFR 1.17(i) (except provisionals)	· · · · · · · · · · · · · · · · · · ·
1454	1,330	1454	1,330	Acceptance of unintentionally delayed claim for priority	
Other f		)	•		
l	ee (specify		<u> </u>		
	oo (opeony	<i></i>		01170741 (0)	<del></del>
*Poduc	ad by Pasis !	ilina Esc <b>F</b>	Daid	SUBTOTAL (3) \$	
*Reduced by Basic Filing Fee Paid					
SUBMITTED BY:  Typed or Printed Name: John Mard					
Signat	ture:		2	Date: 12/31/2003	
Rea. N	lumber:	40,216	1	Telephone Number:(408) 720-8300 x23	 7
	· · · · · · · · · · · · · · · · · · ·	,,-			

## **EXPRESS MAIL CERTIFICATE OF MAILING**

"Express Mail" mailing label number: EL 867636904 US Date of Deposit: 12/31/2003

Alexandria VA 22313-1450

I hereby certify that I am causing this paper or fee to be deposited with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated above and that this paper or fee has been addressed to:

Hail Stop Patent Application

Commissioner for Patent

P O Dox 1450

Judy L. Steinkraus

The second secon	12/31/2003
	Filing/Issue Date: 12/31/2003 LADEN VANOPARTICLES FOR
Gerial/Patent No.: Not yet assigned  Threl Corporation Threl Corporation Threl Corporation Three Corpo	Filing/Assue Date: 127 LADEN NG FLUID/WITH NANOPARTICLES FOR G JPW jxs
Motort No.: Not yet and ion	NC FLUIDVWITH NANOTA
Gerial Patent No.: NOL YEAR TO THE TOTAL T	0
Gerial Intel Corpolation FOR USICient: METHOD AND APPARATUS FOR USICIENT ICATION IN ELECTRONIC COOLING TO THE TOTAL TO THE THE TOTAL TO THE TOTAL TH	Atty/Secty Initials: JPW jxs  Atty/Secty Initials: n/a  Atty/Secty Initials: n/a  Atty/Secty Initials: n/a
Title: TCATTON IN ELECTRONIS	Atty/Secty Intal
APPLICATION 42.P180/0 2003	Docket Due Date: An Architecture on the date stamped nered here 62081
BSTZ File No.: December 31. 2005	Atty/Secty Initials.  Docket Due Date: n/a  Be trademark Office on the date stamped hereon:  Express Mail No.: EL1867636904US Check No. 770.00  Amt: 62146  Check No. 62146  Check No. 62146  Amt: \$144.00
Date Mailed: Decompressived in the U.S. 1 attached	Express Mail No.: EL1867630799  Express Mail No.: EL1867630799  Amt: 62146  Check No. \$144,00
The following has been nes.)	Month(s) Extension of Time  Check No. \$144.00
The following haspgs.)  Amendment/Response (pgs.)	1 Information Disease
Anneal Brief ( pgs.)	Issue Fee Transmittal
Application - Utility (13 pgs., want constant and pgs.)  Application - Rule 1.53(b) Continuation (—— pgs.)  Application - Rule 1.53(b) Divisional (—— pgs.)	- Anneal
Application - Rule 1.53(b) Continuation (	Notice of Appear
- ligation - Rule 1.35(5)	Petition for
Application - Rule 1.53(b) CIP ( pgs.)  Application - Rule 1.53(d) CPA Transmittal ( pgs.)	
	Power of Attorney (pgs.)
	Power of Attorney ( pgs.)  Preliminary Amendment ( pgs.)
Application - Provisional ( pgs.)  Application - Provisional ( pgs.)	Reply Brief (pgs.)  Response to Notice of Missing Parts  Response to Notice of Missing Parts  Inventor/Small Business
Application - Hover Sheet	Response to Notice of Indep. Inventor/Small Business
Assignment and Cover Sheet  Assignment and Cover Sheet	and Entity Declaration to (2 nages)
Certificate of Maning 4 nes. unexecute	
Assignment and Cortificate of Mailing Certificate of Mailing Declaration & POA (4 pgs.) Declaration & POA (5 pgs.)	Transmittal Letter, in duplicate (2 pages)  Fee Transmittal, in duplicate (2 pages)
Declaration & POA (4 pgs.)  Declaration & POA (4 pgs.)  Disclosure Docs & Orig & Copy of Inventor's Signed Letter ( pgs.)  Drawings: 2 # of sheets includes figures	
Drawings:# 01 site	
Figs. 1, 2.	
Other:	